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	Filing Date		2006-02-03	
	First Named Inventor Bryan		/an	
	Art Unit		1656	
	Examiner Name	William Moore		
	Attorney Docket Numb	er	4115-181	

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/W.W.M.	/1	BAIER, K. ET AL., "Evidence for propeptide assisted folding of calcium dependent protease of the cyanobacterium Anabaena", "European Journal of Biochemistry", Aug. 1996, Page(s) 750-755, Volume 241	
/W.W.M./	2	BECH, L. M. ET AL., "Mutational replacements in substilisin 309 ", "European Journal of Biochemistry", May 1,1992, Page(s) 869-874, Volume 209	
/W.W.M	.b	BECH, L. M. ET AL., "Significance of Hydrophobic S4-P4 Interactions in Subtilisin 309 from Bacillus", "Biochemistry", January 1993, Page(s) 2845-2852, Volume 32, Number 11	
/W.W.M./	4	BRYAN, P. ET AL., "Energetics of Folding Subilisin BPN", "Biochemistry", April 1, 1992, Page(s) 4937-4945, Volume 31, Publisher: American Chemical Society	
/W.W.M.	5	BRYAN, P. ET AL., "Catalyis of a Protein Folding Reaction: Mechanistic Implications of the 2.0 A", "Biochemistry", June 1995, Page(s) 10310-10318, Volume 34, Publisher: American Chemical Society	
/W.W.M.	6	BRYAN, P. ET Al, "Prodomains and protein folding catalysis", "Chem. Rev. ", 2002, Page(s) 4805-4816, Volume 102, Number 12	
/W.W.M.	7	CAC, J. ET AL., "The Propeptide Domain of Membrane Type 1-Matrix Metalloproteinase Acts as an Intramolecular Chaperone when Expressed in ", "Journal of Biological Chemistry", September 22, 2000, Page(s) 29648-29653, Volume 275, Number 38	
/W.W.M./	8	CARTER, P. ET AL., "Engineering enzyme specificity by 'substrate-assisted catalysis", "Science", July 24, 1987, Page (s) 394-399, Volume 237, Number 4813	
/W.W.M.	9	CARTER, P. ET AL., 'Dissecting the catalytic triad of a serine protease ", "Nature", April 7, 1988, Page(s) 564-568, Volume 332	
/W.W.M	/ 10	CAWLEY, NIAMH X. ET AL., "Activation and Processing of Non-anchored Yapsin 1 (Yap3p)", "J. Biol. Chem.", January 2, 1998, Page(s) 584-591, Volume 273, Number 1	
/W.W.M.	/11	CRAIK, C. ET AL., "The Catalytic Role of the Active Site Aspartic Acid in Serine Proteases", "Science", Aug. 21, 1987, Page(s) 909-913, Volume 237, Number 4817	

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/W.W.M./	12	ESTELL, D.A. ET Al., "Probing Steric and Hydrophobic Effects on Enzyme-Substrate Interactions by Protein", "Science", August 8, 1986, Page(s) 659-663, Volume 233, Number 4746	
/W.W.M.	13	FABRE, E. ET AL., "Role of the Proregion in the Production and Secretion of the Yarrowia lipolytica Alkaline Extracellular Protease", "The Journal of Biological Chemistry", Feb. 25, 1991, Page(s) 3782-3790, Volume 266, Number 6	
/W.W.M.	14	FUKUDA, R. ET AL., "The Prosequence of Rhizopus niveus Aspartic Proteinase-1Supports Correct Folding and Secretion of its Mature Part in Sac", "The Journal of Biological Chemistry", April 1, 1994, Page(s) 9556-9561, Volume 269, Number 13	
/W.W.M./	15	GALLAGHER, T.D. ET AL., "The prosegment-subtilisin BPN' complex: crystal structure of a specific "oldase", "Structure", September 15, 1995, Page(s) 907-914, Volume 3, Number 9	
/W.W.M.	16	GRON, HANNE, ET AL., "Extensive comparison of the substrate preferences of two subtilisins as determined with peptide substrates which are", "Biochemistry", 1992, Page(s) 6011-6018, Volume 31	
/w.w.m./	17	GRON, HANNE, ET AL, "Studies of binding sites in the subtilisin from bacillus lentus by means of site directed mutagenesis and kinetic", "Subtilisin Enzymes: Practical Protein Engineering", 1996, Page(s) 105-112, Publisher: Plenum Press, Published in: New York	
/W.W.M./	18	GRON, HANNE, ET AL., "Interdependency of the binding subsites in substilisin", "Biochemistry", 1992, Page(s) 8967-8971, Volume 31, Publisher: American Chemical Society	
/W.W.M./	19	HEDSTROM, L., "Serine Protease Mechanism and Specificity", "Chem. Rev.", November 23, 2002, Page(s) 4501-4523, Volume 102	
/W.W.M.	20	KHAN, A. ET AL., "Molecular mechanisms for the conversion of zymogens to active proteolytic enzymes", "Protein Science", 1998, Page(s) 815-836, Volume 7	
/W.W.M	./ 21	MARIE-CLAIRE, C. ET AL., "The Prosequence of Thermolysin Acts as an Intramolecular Chaperone when Expressed in trans with the Mature Sequence in E", "J. Mol. Biol.", Jan. 1999, Page(s) 1911-1915, Volume 285	
/W.W.M./	22	NIRASAWA, SATORU ET AL., "Intramolecular chaperone and inhibitor activities of a propeptide from a bacterial zinc aminopeptidase", "Biochem. J. ", 1999, Page(s) 25-31, Volume 341, Published in: GB	

( Not for submission under 37 CFR 1.99)

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/w.w./	23	PANTOLIANO, M. ET AL., "Large Increases in General Stability for Subtilisin BPN through Incremental", "Biochemistry", June 21, 1989, Page(s) 7205-7213, Volume 28, Publisher: American Chemical Society	
/W.W.M.	24	PERRONA, J. ET AL., "Structural basis of substrate specificity in the serine proteases", "Protein Science", Jan. 1995, Page(s) 337-360, Volume 4	
/W.W.M	/25	RHEINNECKER, M. ET AL., "Engineering a Novel Specificity in Subtilisin BPN", "Biochemistry", February 9, 1993, Page(s) 1199-1203, Volume 32, Number 5, Publisher: American Chemical Society	
/W.W.M./	26	RHEINNECKER, M. ET AL., "Variants of Subtilisin BPN with Altered Specificity Profile", "Biochemistry", February 9, 1993, Page(s) 221-225, Volume 33, Publisher: American Chemical Society	
/W.W.M.	/27	RUAN, B. ET AL., "Stabilizing the Subtilisin BPN" pro-domain by phage display selection: how restrictive is the amino acid code for maximu", "Protein Science", July 1998, Page(s) 2345-2353, Volume 7	
/W.W.M.	28	RUAN, B. ET AL., "Rapid Folding of Calcium-Free Subtilisin by a Stabilized Pro-Domain Mutant", "Biochemistry", May 4, 1999, Page(s) 8562-8571, Volume 38, Number 26, Publisher: American Chemical Society	
/W.W.M.	/29	RUAN, B. ET AL., "Engineering Subtilisin into a Fluoride-Triggered Processing Protease Useful for One-Step Protein Purification", "Biochemistry", October 31, 2004, Page(s) 14539-14546, Volume 43, Number 46, Publisher: American Chemical Society	
/W.W.M.	30	RUAN, B. ET AL., "Engineering Substrate Preference in Subtilisin: Structural and Kinetic Analysis of a Specificity Mutant", "Biochemistry", April 30, 2008, Page(s) 6628-6636, Volume 47, Number 25, Publisher: American Chemical Society	
/W.W.M.	31	RUVINOV, S. ET AL., "Engineering the Independent Folding of the Substilisin BPN' Prodomain: Analysis of the Two- State Folding versus Protein ", "Biochemistry", 1997, Page(s) 10414-10421, Volume 36, Publisher: American Chemical Society	
/W.W.M./	32	SAUTER, N. ET AL., "Structure of a-lytic protease complexed with its pro region", "Nature Structural Biology", November 1998, Page(s) 945-950, Volume 5, Number 11	
/W.W.M.	/33	SHINDE, U. ET AL., "Folding Pathway mediated by intramolecular chaperone", "Proc Natl. Acad. Sci.", August 1993, Page(s) 6924-6928, Volume 90	

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/W.W.M.	34	SORENSON S. ET AL., "Mutational Replacements of the Amino Acid Residues Forming the Hydrophobic", "Biochemistry", June 1, 1993, Page(s) 8994-8999, Volume 32, Publisher: American Chemical Society								
/W.W.M./	35	STRAUSBERG, SUSAN ET AL., "Catalysis of a Protein Folding Reaction: Thermodynamic and Kinetic Analysis of Subfilisin BPN" interactions with Its Pro", "Biochemistry", May 19, 1993, Page(s) 8112-8119, Volume 32, Number 32, Publisher: American Chemical Society								
/W.W.M.	36	VENTURA, S. ET AL., "Mapping the Pro-region of Carboxypeptidase B by Protein Engineering", "THE JOURNAL OF BIOLOGICAL CHEMISTRY", July 9, 1999, Page(s) 19925-19933, Volume 274, Number 28								
/W.W.M./	37	WANG, L. ET AL., "Prodomain mutations at the Subtilisin Interface: Correlation of the binding energy and the rate of ctalyzed folding", "Biochemistry", Jan. 1995, Page(s) 415-420, Volume 15, Publisher: American Chemical Society								
/W.W.M./	38	WANG, L. ET AL., "Engineering the Independent Folding of the Subtilisin BPN' Pro-Domain: Correlation of Pro-Domain Stability with the Rate", "Biochemistry", Jan. 1998, Page(s) 3165-3171, Volume 37, Number 9, Publisher: American Chemical Society								
W.W.M./	39	WELLS, J ET AL., "Cloning, sequencing and secretion of Bacillus amyloliqifacens Subtilisin in Bacillus subtilis",  "Nucleic Acids Research", October 1983, Page(s) 7911-7925, Volume 11, Number 22								
/W.W.M.	40	WETMORE, D.R. ET AL., "Roles of the Propeptide and Metal Ions in the Folding and Stability of the Catalytic Domain of Stromelysin (Matrix Metal", "Blochemistry", 1996, Page(s) 6549-6558, Volume 35								
W.W.M./	41	WINTHER, J. ET AL., "Propeptide of carboxypeptidase Y provides a chaperone-like function as well as inhibition of the enzymatic activity", "Proc. Natl. Acad. Sci.", October 1991, Page(s) 9330-9334, Volume 88								
/W.W.M./	42	YAMAMOTO, YOSHIMI ET AL., "Proregion of Bombyx mori Cysteine Proteinase Functions as an Inframolecular Chaperone to Promote Proper Folding of the M*, "Archives of Insect Biochemistry and Physiology ", Jun. 1999, Page (s) 167-178, Volume 42								
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